



## This is an official **DHEC Health Advisory**

Distributed via Health Alert Network  
April 18, 2013, 8:00 PM  
10286-CHA-04-18-2013-MEASLES

### Measles Outbreak in North Carolina

**On April 17, 2013, the North Carolina Division of Public Health reported seven cases of measles among residents of Stokes and Orange Counties.** All seven cases occurred in persons who were not vaccinated against measles. The index case developed symptoms on April 4, shortly after returning from a trip to India. The most recent case developed symptoms on April 14, 2013. **Potential exposures to these cases are being investigated in the following North Carolina counties: Guilford, Orange, Polk (which borders South Carolina), and Stokes.** At this time, no residents of South Carolina have been identified as contacts to cases in North Carolina. Although efforts are being made to identify all contacts, it is possible that more cases could occur among unrecognized contacts. **DHEC recommends providers consider measles when evaluating patients with certain febrile rash illnesses.**

#### Summary

Measles is a highly contagious, acute viral illness that is transmitted by contact with infectious respiratory droplets or less commonly, by airborne spread. The measles virus can remain viable on surfaces or in the air for up to two hours. The incubation period for measles is usually about 10 days from exposure to onset of fever (range, 7–18 days) and 14 days from exposure to rash onset (range, 7–21 days). Measles can cause severe health complications, including pneumonia, encephalitis, and death. Measles has become rare in the United States and it was declared eliminated from the United States in 2000. However, importations of measles into the United States continue to occur, posing risks for outbreaks and sustained transmission and emphasizing the importance of maintaining high two-dose measles vaccine coverage.

#### Guidance for Clinicians

Clinicians are asked to consider the diagnosis of measles in patients presenting with a febrile rash illness lasting 3 days or more and with clinically compatible symptoms (cough, coryza, and/or conjunctivitis), especially in those who are not vaccinated, and those who recently traveled to the counties in North Carolina where cases have been reported.

#### Testing

Because measles is now rare in the United States, false positive laboratory results are more likely. To reduce false positive measles laboratory results, **all suspect cases should be investigated. Laboratory testing should be restricted to those whose history and clinical presentation are consistent with measles:** those with fever and generalized maculopapular rash lasting 3 days or more with symptoms of cough, coryza, and/or conjunctivitis. Testing for measles in patients with no rash, no fever, a vesicular rash, or a rash limited to the diaper area or that is not generalized potentially leads to false positive results.

Providers are urged to collect appropriate clinical specimens, keeping in mind that specimens should ideally be obtained within 7 days of rash onset and are of little value if collected more than 10 days after rash onset.

- Measles Serology: 5mL whole clotted blood or 2mL serum should be collected and stored and shipped at room temperature. DHEC Bureau of Laboratories (BOL) is able to perform stat diagnostic serology for suspect measles cases. Notify DHEC at 803.898.0861 prior to sending specimens.
- Measles Virus: Throat (oropharyngeal) swabs (and/or nasopharyngeal [NP] swabs) are the preferred clinical samples for measles virus detection. Swabs for virus detection should be taken at the same time that blood for measles serology is obtained. Sterile Dacron or synthetic swabs should be used, placed in viral transport medium and refrigerated. DHEC BOL can hold these specimens for possible testing at CDC.

## **Reporting of Cases**

**Suspect cases of measles should be reported to DHEC immediately by phone.** Cases of patients presenting with a febrile rash illness lasting 3 days or more and clinically compatible symptoms (cough, coryza, and/or conjunctivitis), especially those who are not vaccinated, those who recently traveled to the counties in North Carolina where cases have been identified should be reported to DHEC via the phone numbers listed below. DHEC can arrange for testing of specimens collected, as appropriate.

**Any laboratory confirmation of an acute case of measles should be reported to DHEC immediately by phone.** Laboratory confirmation includes: measles IgM positive, isolation of measles virus in culture, or detection of measles by PCR.

## **Resources for Additional Information**

- CDC Measles Overview  
<http://www.cdc.gov/measles/index.html>
- SCDHEC Bureau of Laboratories Services Guide  
<http://www.scdhec.gov/health/lab/docs/all.pdf>
- CDC Measles Lab Tools  
<http://www.cdc.gov/measles/lab-tools/index.html>

## DHEC contact information for reportable diseases and reporting requirements

Reporting of confirmed and suspected measles cases is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2011 List of Reportable Conditions available at:  
<http://www.scdhec.gov/administration/library/CR-009025.pdf>.

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

### Regional Public Health Offices – 2013

**Mail or call reports to the Epidemiology Office in each Public Health Region.**

#### **LOW COUNTRY PUBLIC HEALTH REGION**

**Berkeley, Charleston, Dorchester**  
4050 Bridge View Drive, Suite 600  
N. Charleston, SC 29405  
Phone: (843) 953-0047  
Fax: (843) 953-0051  
Nights / Weekends: (843) 219-8470

**Beaufort, Colleton, Hampton, Jasper**  
219 S. Lemacks Street  
Walterboro, SC 29488  
Phone: (843) 441-1091  
Fax: (843) 549-6845  
Nights / Weekends: 1-843-441-1091

**Allendale, Bamberg, Calhoun, Orangeburg**  
PO Box 1126  
1550 Carolina Avenue  
Orangeburg, SC 29116  
Phone: (803) 268-5833  
Fax: (803) 533-7134  
Nights / Weekends: (803) 535-9265

**MIDLANDS PUBLIC HEALTH REGION**  
**Fairfield, Lexington, Newberry, Richland**  
2000 Hampton Street  
Columbia, SC 29204  
Phone: (803) 576-2749  
Fax: (803) 576-2993  
Nights / Weekends: 1-888-554-9915

**Chester, Kershaw, Lancaster, York**  
PO Box 817  
1833 Pageland Highway  
Lancaster, SC 29720  
Phone: (803) 286-9948  
Fax: (803) 286-5418  
Nights / Weekends: 1-866-867-3886

**Aiken, Barnwell, Edgefield, Saluda**  
222 Beaufort Street, NE  
Aiken, SC 29801  
Phone: (803) 642-1618  
Fax: (803) 643-8386  
Nights / Weekends: (803) 645-8167

**PEE DEE PUBLIC HEALTH REGION**  
**Chesterfield, Darlington, Dillon, Florence, Marlboro, Marion**  
145 E. Cheves Street  
Florence, SC 29506  
Phone: (843) 661-4830  
Fax: (843) 661-4859  
Nights / Weekends: (843) 601-7051

**Clarendon, Lee, Sumter**  
PO Box 1628  
105 North Magnolia Street  
Sumter, SC 29150  
Phone: (803) 773-5511  
Fax: (803) 775-9941  
Nights/Weekends: 803-458-1847

**Georgetown, Horry, Williamsburg**  
1931 Industrial Park Road  
Conway, SC 29526-5482  
Phone: (843) 915-8804  
Fax: (843) 365-0085  
Nights/Weekends: (843) 340-4754

**UPSTATE PUBLIC HEALTH REGION**  
**Anderson, Oconee**  
220 McGee Road  
Anderson, SC 29625  
Phone: (864) 260-4358  
Fax: (864) 260-5623  
Nights / Weekends: 1-866-298-4442

**Abbeville, Greenwood, Laurens, McCormick**  
1736 S. Main Street  
Greenwood, SC 29646  
Phone: 1-888-218-5475  
Fax: (864) 942-3690  
Nights / Weekends: 1-800-420-1915

**Greenville, Pickens**  
PO Box 2507  
200 University Ridge  
Greenville, SC 29602-2507  
Phone: (864) 372-3133  
Fax: (864) 282-4373  
Nights / Weekends: (864) 809-3825

#### **UPSTATE PUBLIC HEALTH REGION (continued)**

**Cherokee, Spartanburg, Union**  
PO Box 4217  
151 E. Wood Street  
Spartanburg, SC 29305-4217  
Phone: (864) 372-3133  
Fax: (864) 282-4373  
Nights / Weekends: (864) 809-3825

**DHEC Bureau of Disease Control**  
**Division of Acute Disease Epidemiology**  
1751 Calhoun Street  
Box 101106  
Columbia, SC 29211  
Phone: (803) 898-0861  
Fax: (803) 898-0897  
Nights / Weekends: 1-888-847-0902



[www.scdhec.gov](http://www.scdhec.gov)